



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,213	01/04/2002	Syuuichi Azechi	0171-0808P-SP	3484

2292 7590 04/04/2003
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

FEELY, MICHAEL J

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 04/04/2003

24

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/035,213

Applicant(s)

AZECHI ET AL.

Examiner

Michael J Feely

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1712

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d), a translation of the foreign application should be submitted under 37 CFR 1.55 in reply to this action in order to overcome the intervening references.

Claim Rejections - 35 USC § 102/103

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language;

or

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

Art Unit: 1712

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, and 4 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Azechi (Pub. No. US 2002/0032270).

The applied reference has a common assignee with the instant application; however, the inventive entity is different. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claims 1, 3 and 4, Azechi discloses a silicon rubber adhesive composition (paragraphs 0007-0011) comprising (A) 100 parts by weight of a heat curable organopolysiloxane composition (paragraph 0008), (B) 1 to 100 parts by weight of reinforcing silica fines (paragraph 0009), and (C) 0.1 to 50 parts by weight of an organic compound or organosilicon compound having epoxy-functionality and least one aromatic ring in a molecule (paragraph 0010 and 0056-0057); and an integrally molded article comprising a silicone rubber adhesive composition in the cured state and a thermoplastic resin (paragraph 0012), said silicone rubber adhesive composition comprising (A) 100 parts by weight of a heat curable

Art Unit: 1712

organopolysiloxane composition (paragraph 0008), (B) 1 to 100 parts by weight of reinforcing silica fines (paragraph 0009), and (C) 0.1 to 50 parts by weight of an organic compound or organosilicon compound having epoxy-functionality and least one aromatic ring in a molecule (paragraph 0010 and 0056-0057).

Azechi does not explicitly disclose that component (C) has an epoxy equivalence of 100 to 5000 g/mol; however, based on the formulae provided in paragraphs 0056-0057, this epoxy equivalence would have been an inherent property.

Azechi also does not explicitly disclose that the composition provides greater bond strength to organic resins than to metals. It has been found that a chemical composition and its properties are inseparable; therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present – *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Therefore, if not explicitly taught in the reference, then the teachings would have been obvious to one of ordinary skill in the art at the time of the invention.

6. Claims 1, 3, and 4 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fujiki et al. (Pub. No. US 2002/0028335).

The applied reference has a common assignee with the instant application; however, the inventive entity is different. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Art Unit: 1712

Regarding claims 1, 3 and 4, Fujiki et al. disclose a silicon rubber adhesive composition (paragraphs 0007-0011) comprising (A) 100 parts by weight of a heat curable organopolysiloxane composition (paragraph 0008), (B) 1 to 100 parts by weight of reinforcing silica fines (paragraph 0009), and (C) 0.1 to 50 parts by weight of an organic compound or organosilicon compound having epoxy-functionality and least one aromatic ring in a molecule (paragraph 0010 and 0061-0062); and an integrally molded article comprising a silicone rubber adhesive composition in the cured state and a thermoplastic resin (paragraph 0012), said silicone rubber adhesive composition comprising (A) 100 parts by weight of a heat curable organopolysiloxane composition (paragraph 0008), (B) 1 to 100 parts by weight of reinforcing silica fines (paragraph 0009), and (C) 0.1 to 50 parts by weight of an organic compound or organosilicon compound having epoxy-functionality and least one aromatic ring in a molecule (paragraph 0010 and 0061-0062).

Azechi does not explicitly disclose that component (C) has an epoxy equivalence of 100 to 5000 g/mol; however, based on the formulae provided in paragraphs 0061-0062, this epoxy equivalence would have been an inherent property.

Azechi also does not explicitly disclose that the composition provides greater bond strength to organic resins than to metals. It has been found that a chemical composition and its properties are inseparable; therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present – *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Therefore, if not explicitly taught in the reference, then the teachings would have been obvious to one of ordinary skill in the art at the time of the invention.

Claim Rejections - 35 USC § 103

7. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita et al. (US Pat. No. 5,530,075) in view of Meguriya et al. (US Pat. No. 5,714,265).

Regarding claims 1 and 2, Morita et al. disclose a silicon rubber adhesive composition (column 2, lines 35-53) comprising (A) 100 parts by weight of a heat curable organopolysiloxane composition (column 2, line 36; column 3, lines 21-24), (B) reinforcing silica fines (column 3, lines 32-43 and 50-62), and (C) 0.1 to 50 parts by weight of an organic compound or organosilicon compound having epoxy-functionality and least one aromatic ring in a molecule (column 2, lines 36-53; column 4, lines 30-40); wherein component (C) is an organosilicon compound containing at least one Si-H group in a molecule (column 2, lines 36-53; column 4, lines 30-40).

Morita et al. do not explicitly disclose, that component (C) has an epoxy equivalence of 100 to 5,000 g/mol; however, they disclose, "in order for component B (*corresponding to claimed component (C)*) to have superior compatibility with component A, the number of monofunctional siloxane units having alkoxysilylalkyl groups or organic groups that contain epoxy groups must be at least 0.05 per each tetrafunctional siloxane unit," (column 4, lines 54-59). This occurrence of monofunctional siloxane units containing epoxy groups would have inherently provided an epoxy equivalence within the claimed range.

Morita et al. are also silent regarding the concentration of reinforcing silica fines; however, Applicant fails to show criticality of this range. The concentration of reinforcing filler is a known result-effective variable. Evidence of this is provided in Meguriya et al. (see column 4, lines 22-31). A very low concentration has a tendency to not provide the desired reinforcing

Art Unit: 1712

properties, and a very high concentration has a tendency to cause high viscosity, resulting in poor flow characteristics. It would have been obvious to optimize this variable because of the predictable effects of the filler concentration on the overall resin system. It has been found that in the absence of criticality and where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation – *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 3, Morita et al. do not explicitly disclose that the composition provides greater bond strength to organic resins than to metals. It has been found that a chemical composition and its properties are inseparable; therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present – *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Therefore, if not explicitly taught in the reference, then the teachings would have been obvious to one of ordinary skill in the art at the time of the invention.

Allowable Subject Matter

8. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: Morita et al. disclose the silicone composition set forth in claim 5; however, they provide no motivation to form an integrally molded article with this composition and a thermoplastic resin. The curable resin of Morita et al. has superior flow characteristics prior to coating, which make it

Art Unit: 1712

suitable for molding and other application methods; however, the utility of this composition is limited to a generic adhesive and as a curable sealing composition for electronic elements. The reference fails to suggest the use of a thermoplastic resin in any of these applications. Although the composition *could* be used for form an integrally molded article, motivation to do so, is not provided by the reference.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J Feely whose telephone number is 703-305-0268. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson can be reached on 703-308-2340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Michael J. Feely
April 2, 2003



Robert Dawson
Supervisory Patent Examiner
Technology Center 1700